

SEQUENCE LISTING

<110> Perez, Pascual  
Gutierrez-Marcos, Jose  
Dickinson, Hugh

<120> MEG1 Endosperm-Specific Promoter and Genes

<130> 11887\*8

<150> PCT/EP04/052760  
<151> 2004-11-04

<150> EP 03292739.4  
<151> 2003-11-03

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<170> PatentIn version 3.2

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atagataact tacaattttg totaaaagag actaaatcac tgctaagttt ggtctttggt 240  
gaatacttgc cagtgaattg gttttcgcta tagtatatat ataagtatac actcttctag 300  
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caagagctct cggcacagac aggtcatgtc acagatgatg tcggagtttc tactccagct      540
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Cys Cys Ile Gly Gly Asp Val Gly Phe Pro Pro Cys Lys Asp Asn Lys
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Cys Tyr Cys Cys Ile Gly Gly Arg Thr His Ala Arg Tyr Ser Thr Leu
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Ala Glu Cys Ser His Ala Cys Phe  
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Lys Asp Asn Lys Cys Tyr Cys Cys Ile Gly Gly Arg Thr His Ala Arg  
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Tyr Ser Thr Met Ala Glu Cys Ser His Ala Cys Phe  
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35 40 45

Val Asn Lys Glu Ser Arg His Pro Gly Gly Asp Pro His Val Leu Cys  
50 55 60

Phe Val Asp Phe Asp Asn Pro Ala Gln Ala Thr Ile Ala Leu Glu Ala  
65 70 75 80

Leu Gln Gly His Val Thr Asp Asp Val Asn Val Ser Ala Pro Ala Glu  
85 90 95

Glu Gly Ile Leu Arg Glu Lys Arg Ala Gln Cys Ala Gln Gly Phe Leu  
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Pro Cys Lys Asp Asn Lys Cys Tyr Cys Cys Ile Gly Gly Arg Thr His  
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 cgtccattga ctagtttaatt ttctatctat atgttttgta tccaatgatg catgtaaaac 900  
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 gaaatttgcc cctgagcaat acaatgaaat ttaccaatg tgttatttat atattaatgt 1020  
 gtctaaaaaa aaaaaaaaaa a 1041

<210> 52  
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 <212> PRT  
 <213> Zea mays

<220>  
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 <223> MRP1

<400> 52

Met Asn Pro Asn Phe Asn Ser Val Trp Ser Ala Pro Glu Ile Asn Met  
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Met Asn Ser Leu Ile Thr Ser His Ile Ala Asn Asn Thr Tyr Thr Asn  
 20 25 30

Asn Asn Gln His Val Val Ala Ser Arg Ser Ala Ile Val Asn His Asn  
 35 40 45

Asn Phe Gly Met Pro Thr Glu Val Val Pro Pro Val Asp Asn Met Asp  
 50 55 60

Met Met Gln Gly Tyr Leu Met Ala Asp Thr Asp Ala Met Arg Leu Val  
 65 70 75 80

Gln Gly Gln Gln His Met Pro Asn Val Val Pro Asn Gln Arg Arg His

85								90				95			
Ala	Val	Lys	Phe	Trp	Thr	Thr	Asp	Glu	His	Arg	Asn	Phe	Leu	Arg	Gly
			100					105					110		
Leu	Glu	Val	Phe	Gly	Arg	Gly	Lys	Trp	Lys	Asn	Ile	Ser	Lys	Tyr	Phe
		115					120					125			
Val	Pro	Thr	Arg	Thr	Pro	Val	Gln	Ile	Ser	Ser	His	Ala	Gln	Lys	Tyr
	130					135					140				
Phe	Arg	Arg	Gln	Glu	Cys	Thr	Thr	Glu	Lys	Gln	Arg	Phe	Ser	Ile	Asn
145					150					155					160
Asp	Val	Gly	Leu	Tyr	Asp	Thr	Gln	Pro	Trp	Val	Arg	Gln	Asn	Asn	Ser
			165						170					175	
Ser	Ser	Ser	Trp	Glu	Ala	Leu	Thr	Phe	Thr	Ala	Gly	Arg	Ala	Tyr	Asn
			180					185					190		
Asn	Thr	Asn	Tyr	Cys	Ala	Phe	Asn	Ser	Leu	Pro	Tyr	Ala	Ser	Ser	Gln
	195						200					205			
Ala	Ser	Asn	Asn	Gln	Val	Ala	Thr	Trp	Ile	Thr	Asp	Gln	Gln	Ala	Thr
	210					215					220				
Ala	Ser	Ser	Ser	Ile	Ala	Pro	Pro	Ala	Thr	Glu	Glu	Ser	Gln	Ile	Tyr
225					230					235					240
Asn Arg															

<210> 53  
 <211> 83  
 <212> PRT  
 <213> Zea mays

<220>  
 <221> MISC\_FEATURE  
 <223> MEG1-3, second ORF

<400> 53

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			20					25					30		

Ser Thr Pro Ala Lys Glu Gly Ile Met Gln Gly Asn Gly Ala Arg Cys  
 35 40 45

Asp Val Gly Phe Pro Pro Cys Lys Asp Asn Lys Cys Tyr Cys Cys Ile  
 50 55 60

Gly Gly Arg Thr His Ala Arg Tyr Ser Thr Leu Ala Glu Cys Ser His  
 65 70 75 80

Ala Cys Phe

<210> 54  
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<400> 54

Pro Cys Lys Asp Asn Lys Cys Tyr Cys Cys Ile Gly Gly Arg Thr His  
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<220>  
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<400> 55  
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<210> 56  
 <211> 20  
 <212> DNA  
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<220>  
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<400> 56  
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<210> 57  
 <211> 37  
 <212> DNA  
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<220>
<223> MEG promoters conserved sequence

<400> 57
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<210> 58
<211> 1350
<212> DNA
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<220>
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<223> MEG1-1 genomic sequence

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aggctaggac atcccctagt cagctgcctg tgggtgggta atttacgttg gcttcgtttc 120
aattctgtgt actttgattt atattatgta aattactcta gtcttttata ttatttctta 180
ctctttattg ttattcgaag cattgtgtta tgatgagtca tttatgtaat tgctatgtac 240
gtgagttttg atcctagcac gtacatgggt cgcattcggt ttaccttcta aaacctgggg 300
tgacaggtgg catagcagga gtggagggca gcgacggctg cacagctctg cgtgcagtgg 360
cttgcaattgt ttgctcctcg ttggcgatgc gtgtgcgacc atgagctctc gacacaggtg 420
ggtagtagta gagccagaat tgtaaccttg ggttttccca cacctcaaat agatatagat 480
atagggatat agatagatat agcaaattca ccaaataata taggggtata gatatagata 540
taagaagggg tatagatata gatatagata tatagaagat atagatagat agatagatat 600
gatagaatag ataacttaca attttgtcta aaagaaacta aatcactgct aagtttggag 660
tagcatatct ttgggtgaata cttgctagtg aattgggttc cgctatagta tatatatata 720
agtatacact cttctaggat tatagtatat atatatatat aagtatacac tcttctagga 780
tcaatcgtga ggagttcatt aaattgtctt gcgacatgga gtacagaaag aggggtggatg 840
cgctagtgtt tttctcgta cttctcctcg gatactttgc tgctcatgca catgggaagg 900
gtaagtgaag actatacaga catgtgtgtg catgcttaga tagatctaga caatttagaa 960
gatgttatta tatgataccg tgtgtatcat ggcgaattgc taatgtatcg caatcccctg 1020
tgttaaatta ctcaaataat ttcgaatgta attattctcg aggcatttgt tggtaataga 1080
actcttatcc tataccttct actaggtcat gtcacagatg atgtcagtgt ttctactcca 1140
gctaaagaag gaattatgca aggaacgga gcacgatgcg ttgtagggtt tcctccatgc 1200
aaagataaca agtgctactg ctgcattggg gggcgaaactc atgctcgcta ctctcgatgg 1260
ctgatgtaga catgcctgct tctaacaaaa taagacgttg tatatatcat gtatggagga 1320

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atttataata ttatggaatt agttgtatat 1350

<210> 59  
 <211> 127  
 <212> DNA  
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<220>  
 <223> oligonucleotide

<220>  
 <221> misc\_feature  
 <223> nucleotides 1-127 of promoter MEG1-1

<400> 59  
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 gatagatata gcaaattcac caaataatat agaggtatag atatagatat aacaaggggt 120  
 atatata 127

<210> 60  
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 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide

<400> 60  
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<210> 61  
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 <212> DNA  
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<220>  
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<400> 61  
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<210> 62  
 <211> 500  
 <212> DNA  
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<400> 62  
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 agaattgtaa ccttgggttt tcccacacct caaatagata tagatatagg gatatatagata 180

gatatagcaa attcaccaaa taatataggg gtatagatat agatataaga aggggtatag	240
atatagatat agatatatag aagatataga tagatagata gatatgatag aatagataac	300
ttacaatttt gtctaaaaga aactaaatca ctgctaagtt tggagtagca tatctttggt	360
gaatacttgc tagtgaattg gtttccgcta tagtatatat atataagtat acactcttct	420
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tcattaaatt gtcttgcgac	500

<210> 63  
 <211> 32  
 <212> DNA  
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<220>  
 <223> oligonucleotide

<400> 63	
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<210> 64  
 <211> 30  
 <212> DNA  
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<220>  
 <223> oligonucleotide

<400> 64	
ggatcctcga gcctctagta tcggtctgac	30